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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/209,961DATE: 11/30/1999
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This Raw Listing contains the General Information
Section and up to first 5 pages.

ENTERED

1 <110> APPLICANT: WANG, LI
2 BABIUK, LORNE A.
3 POTTER, ANDREW A.
4 WILLSON, PHILIP
5 <120> TITLE OF INVENTION: POSTWEANING MULTISYSTEM WASTING SYNDROME VIRUS FROM
6 PIGS
7 <130> FILE REFERENCE: 9000-0040
8 <140> CURRENT APPLICATION NUMBER: US/09/209,961
9 <141> CURRENT FILING DATE: 1998-12-10
10 <150> EARLIER APPLICATION NUMBER: 60/069,233
11 <151> EARLIER FILING DATE: 1997-12-11
12 <150> EARLIER APPLICATION NUMBER: 60/069,750
13 <151> EARLIER FILING DATE: 1997-12-16
14 <160> NUMBER OF SEQ ID NOS: 24
15 <170> SOFTWARE: PatentIn Ver. 2.0
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18 <212> TYPE: DNA
19 <213> ORGANISM: Porcine Circovirus Type II
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23 cttccgaaga cgagcgcaag aaaatacggg agtcccaat ctccctattt gattatttta 180
24 ttgttggcga ggagggtaat gaggaaggac gaacacctca cctccagggg ttcgctaatt 240
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30 attggaaaac caatgtacac ttcattgttg ggccacctgg gtgtggtaaa agcaaattgg 600
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44 ccactcccct atcaccttgg gtgatggggg agcaaggcca gaattcaacc ttaacctttc 1440

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47      gcttgacagt atatccgaag gtgcgggaga ggcgggtgtt gaagatgcca tttttccttc 1620
48      tccaacggta gcggtggcgg ggggtggacga gccaggggcg gcggcgagg atctggccaa 1680
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83      tgaaggcggg gtgtgcaaaa tatggtcttc tccggaggat gtttccaaga tggctgcggg 1680
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88 <212> TYPE: PRT

89 <213> ORGANISM: Porcine Circovirus Type II

90 <400> SEQUENCE: 3

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93      Trp Val Phe Thr Leu Asn Asn Pro Ser Glu Asp Glu Arg Lys Lys Ile
94      20              25              30

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97      Gly Asn Glu Glu Gly Arg Thr Pro His Leu Gln Gly Phe Ala Asn Phe
98              50                      55                      60
99      Val Lys Lys Gln Thr Phe Asn Lys Val Lys Trp Tyr Leu Gly Ala Arg
100      65                      70                      75                      80
101      Cys His Ile Glu Lys Ala Lys Gly Thr Asp Gln Gln Asn Lys Glu Tyr
102              85                      90                      95
103      Cys Ser Lys Glu Gly Asn Leu Leu Ile Glu Cys Gly Ala Pro Arg Ser
104              100                      105                      110
105      Gln Gly Gln Arg Ser Asp Leu Ser Thr Ala Val Ser Thr Leu Leu Glu
106              115                      120                      125
107      Ser Gly Ile Leu Val Thr Val Ala Glu Gln His Pro Val Thr Phe Val
108              130                      135                      140
109      Lys Asn Phe Arg Gly Leu Ala Glu Leu Leu Lys Val Ser Gly Lys Met
110      145                      150                      155                      160
111      Gln Lys Arg Asp Trp Lys Thr Asn Val His Phe Ile Val Gly Pro Pro
112              165                      170                      175
113      Gly Cys Gly Lys Ser Lys Trp Ala Ala Asn Phe Ala Asn Pro Glu Thr
114              180                      185                      190
115      Thr Tyr Trp Lys Pro Pro Lys Asn Lys Trp Trp Asp Gly Tyr His Gly
116              195                      200                      205
117      Glu Lys Val Val Val Ile Asp Asp Phe Tyr Gly Trp Leu Pro Trp Asp
118              210                      215                      220
119      Asp Leu Leu Arg Leu Cys Asp Arg Tyr Pro Leu Thr Val Lys Thr Lys
120      225                      230                      235                      240
121      Gly Gly Thr Val Pro Phe Leu Ala Arg Ser Ile Leu Ile Thr Ser Asn
122              245                      250                      255
123      Gln Thr Pro Leu Glu Trp Tyr Ser Ser Thr Ala Val Pro Ala Val Glu
124              260                      265                      270
125      Ala Leu Tyr Arg Arg Ile Thr Ser Leu Val Phe Trp Lys Asn Ala Thr
126              275                      280                      285
127      Lys Gln Ser Thr Glu Glu Gly Gly Gln Phe Val Thr Leu Ser Pro Pro
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129      Cys Pro Glu Phe Pro Tyr Glu Ile Asn Tyr
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133      <212> TYPE: PRT
134      <213> ORGANISM: Porcine Circovirus Type I
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138      Thr Leu Asn Asn Pro Ser Glu Glu Glu Lys Asn Lys Ile Arg Glu Leu
139              20                      25                      30
140      Pro Ile Ser Leu Phe Asp Tyr Phe Val Cys Gly Glu Glu Gly Leu Glu
141              35                      40                      45
142      Glu Gly Arg Thr Pro His Leu Gln Gly Phe Ala Asn Phe Ala Lys Lys
143              50                      55                      60
144      Gln Thr Phe Asn Lys Val Lys Trp Tyr Phe Gly Ala Arg Cys His Ile

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146	Glu Lys Ala Lys Gly Thr Asp Gln Gln Asn Lys Glu Tyr Cys Ser Lys			
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148	Glu Gly His Ile Leu Ile Glu Cys Gly Ala Pro Arg Asn Gln Gly Lys			
149		100	105	110
150	Arg Ser Asp Leu Ser Thr Ala Val Ser Thr Leu Leu Glu Thr Gly Ser			
151		115	120	125
152	Leu Val Thr Val Ala Glu Gln Phe Pro Val Thr Tyr Val Arg Asn Phe			
153		130	135	140
154	Arg Gly Leu Ala Glu Leu Leu Lys Val Ser Gly Lys Met Gln Gln Arg			
155	145	150	155	160
156	Asp Trp Lys Thr Ala Val His Val Ile Val Gly Pro Pro Gly Cys Gly			
157		165	170	175
158	Lys Ser Gln Trp Ala Arg Asn Phe Ala Glu Pro Arg Asp Thr Tyr Trp			
159		180	185	190
160	Lys Pro Ser Arg Asn Lys Trp Trp Asp Gly Tyr His Gly Glu Glu Val			
161		195	200	205
162	Val Val Leu Asp Asp Phe Tyr Gly Trp Leu Pro Trp Asp Asp Leu Leu			
163		210	215	220
164	Arg Leu Cys Asp Arg Tyr Pro Leu Thr Val Glu Thr Lys Gly Gly Thr			
165	225	230	235	240
166	Val Pro Phe Leu Ala Arg Ser Ile Leu Ile Thr Ser Asn Gln Ala Pro			
167		245	250	255
168	Gln Glu Trp Tyr Ser Ser Thr Ala Val Pro Ala Val Glu Ala Leu Tyr			
169		260	265	270
170	Arg Arg Ile Thr Thr Leu Gln Phe Trp Lys Thr Ala Gly Glu Gln Ser			
171		275	280	285
172	Thr Glu Val Pro Glu Gly Arg Phe Glu Ala Val Asp Pro Pro Cys Ala			
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174	Leu Phe Pro Tyr Lys Ile Asn Tyr			
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183	Ser His Leu Gly Gln Ile Leu Arg Arg Arg Pro Trp Leu Val His Pro			
184		20	25	30
185	Arg His Arg Tyr Arg Trp Arg Arg Lys Asn Gly Ile Phe Asn Thr Arg			
186		35	40	45
187	Leu Ser Arg Thr Phe Gly Tyr Thr Val Lys Arg Thr Thr Val Thr Thr			
188		50	55	60
189	Pro Ser Trp Ala Val Asp Met Met Arg Phe Lys Ile Asp Asp Phe Val			
190	65	70	75	80
191	Pro Pro Gly Gly Gly Thr Asn Lys Ile Ser Ile Pro Phe Glu Tyr Tyr			
192		85	90	95
193	Arg Ile Arg Lys Val Lys Val Glu Phe Trp Pro Cys Ser Pro Ile Thr			
194		100	105	110

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195      Gln Gly Asp Arg Gly Val Gly Ser Thr Ala Val Ile Leu Asp Asp Asn
196              115                      120                      125
197      Phe Val Thr Lys Ala Thr Ala Leu Thr Tyr Asp Pro Tyr Val Asn Tyr
198              130                      135                      140
199      Ser Ser Arg His Thr Ile Pro Gln Pro Phe Ser Tyr His Ser Arg Tyr
200      145                      150                      155                      160
201      Phe Thr Pro Lys Pro Val Leu Asp Ser Thr Ile Asp Tyr Phe Gln Pro
202              165                      170                      175
203      Asn Asn Lys Arg Asn Gln Leu Trp Leu Arg Leu Gln Thr Ser Gly Asn
204              180                      185                      190
205      Val Asp His Val Gly Leu Gly Thr Ala Phe Glu Asn Ser Lys Tyr Asp
206              195                      200                      205
207      Gln Asp Tyr Asn Ile Arg Val Thr Met Tyr Val Gln Phe Arg Glu Phe
208              210                      215                      220
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210      225                      230
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213      <212> TYPE: PRT
214      <213> ORGANISM: Porcine Circovirus Type I
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218      Ser His Leu Gly Asn Ile Leu Arg Arg Arg Pro Tyr Leu Ala His Pro
219              20                      25                      30
220      Ala Phe Arg Asn Arg Tyr Arg Trp Arg Arg Lys Thr Gly Ile Phe Asn
221              35                      40                      45
222      Ser Arg Leu Ser Thr Glu Phe Val Leu Thr Ile Lys Gly Gly Tyr Ser
223              50                      55                      60
224      Gln Pro Ser Trp Asn Val Asn Tyr Leu Lys Phe Asn Ile Gly Gln Phe
225      65                      70                      75                      80
226      Leu Pro Pro Ser Gly Gly Thr Asn Pro Leu Pro Leu Pro Phe Gln Tyr
227              85                      90                      95
228      Tyr Arg Ile Arg Lys Ala Lys Tyr Glu Phe Tyr Pro Arg Asp Pro Ile
229              100                      105                      110
230      Thr Ser Asn Gln Arg Gly Val Gly Ser Thr Val Val Ile Leu Asp Ala
231              115                      120                      125
232      Asn Phe Val Thr Pro Ser Thr Asn Leu Ala Tyr Asp Pro Tyr Ile Asn
233              130                      135                      140
234      Tyr Ser Ser Arg His Thr Ile Arg Gln Pro Phe Thr Tyr His Ser Arg
235      145                      150                      155                      160
236      Tyr Phe Thr Pro Lys Pro Glu Leu Asp Gln Thr Ile Asp Trp Phe His
237              165                      170                      175
238      Pro Asn Asn Lys Arg Asn Gln Leu Trp Leu His Leu Asn Thr His Thr
239              180                      185                      190
240      Asn Val Glu His Thr Gly Leu Gly Tyr Ala Leu Gln Asn Ala Ala Thr
241              195                      200                      205
242      Ala Gln Asn Tyr Val Val Arg Leu Thr Ile Tyr Val Gln Phe Arg Glu
243              210                      215                      220
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VERIFICATION SUMMARY
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